(I) Answer the questions about a beam with bents at right angle in the $x-y$ plane receiving a load in the $z$ direction, $P$ at the point D as shown in Fig. 1. ( 25 points)
(1) Determine the displacement in the $z$ direction at the point $\mathrm{B}, \delta_{\mathrm{B}}$.
(2) Determine the displacement in the $z$ direction at the point $\mathrm{D}, \delta_{\mathrm{D}}$.


Fig. 2

